Application No.:

10/507,396

Filing Date:

September 10, 2004

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A method for the manufacture of high concentration manganese minitablets for aluminum bath alloying, which has as its object the production of Mn minitablets or tablets with a concentration between 90 and 98 wt% of said manganese, starting from a mixture of powdered unheated [[α -]] Mn and Al for the alloying of aluminum and other metal baths, which comprises:

- grinding electrolytic Mn from flakes of a chemical purity of 99.7% or more,
- (b) mixing said powdered [[α-]]Mn without subjecting it to any heat treatment with Al powder atomized by mechanical means, wherein said Al powder has a controlled grain size distribution between 100 and 800 microns and over 80 wt% of said Al powder is between 350 and 720 microns, and
- (c) checking to insure that the content of fine <u>unheated</u> [$[\alpha$ -]]Mn powder with a size of less than 100 microns is not more than 15% by volume.
- 2. **(Previously presented)** The method for the manufacture of high concentration manganese minitablets for aluminum bath alloying, according to claim 1, characterized in that the ground electrolytic Mn is subjected to a screening process with a sieve with a mesh of less than 450 microns.
- 3. **(Previously presented)** The method for the manufacture of high concentration manganese minitablets for aluminum bath alloying, according to claim 1, characterized in that the levels of the Mn and Al in the corresponding compacting means are monitored by respective sensors to keep this mix level between limits that assure the execution of the actual compacting.

4-5. (Canceled)